

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

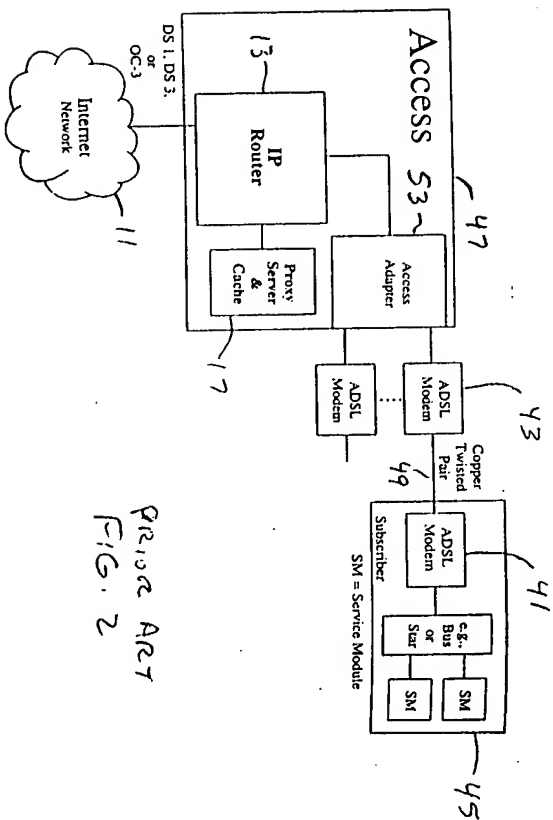
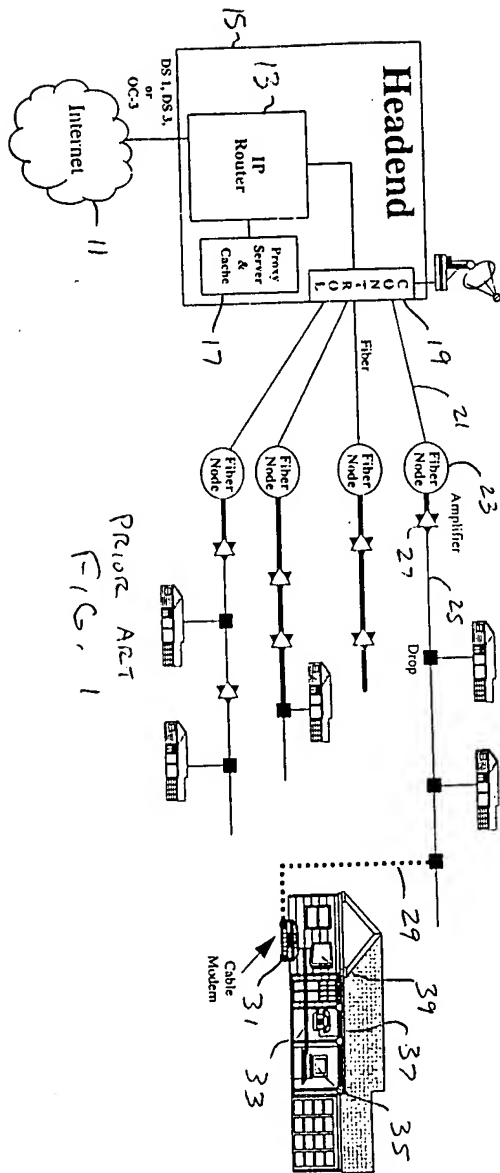
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



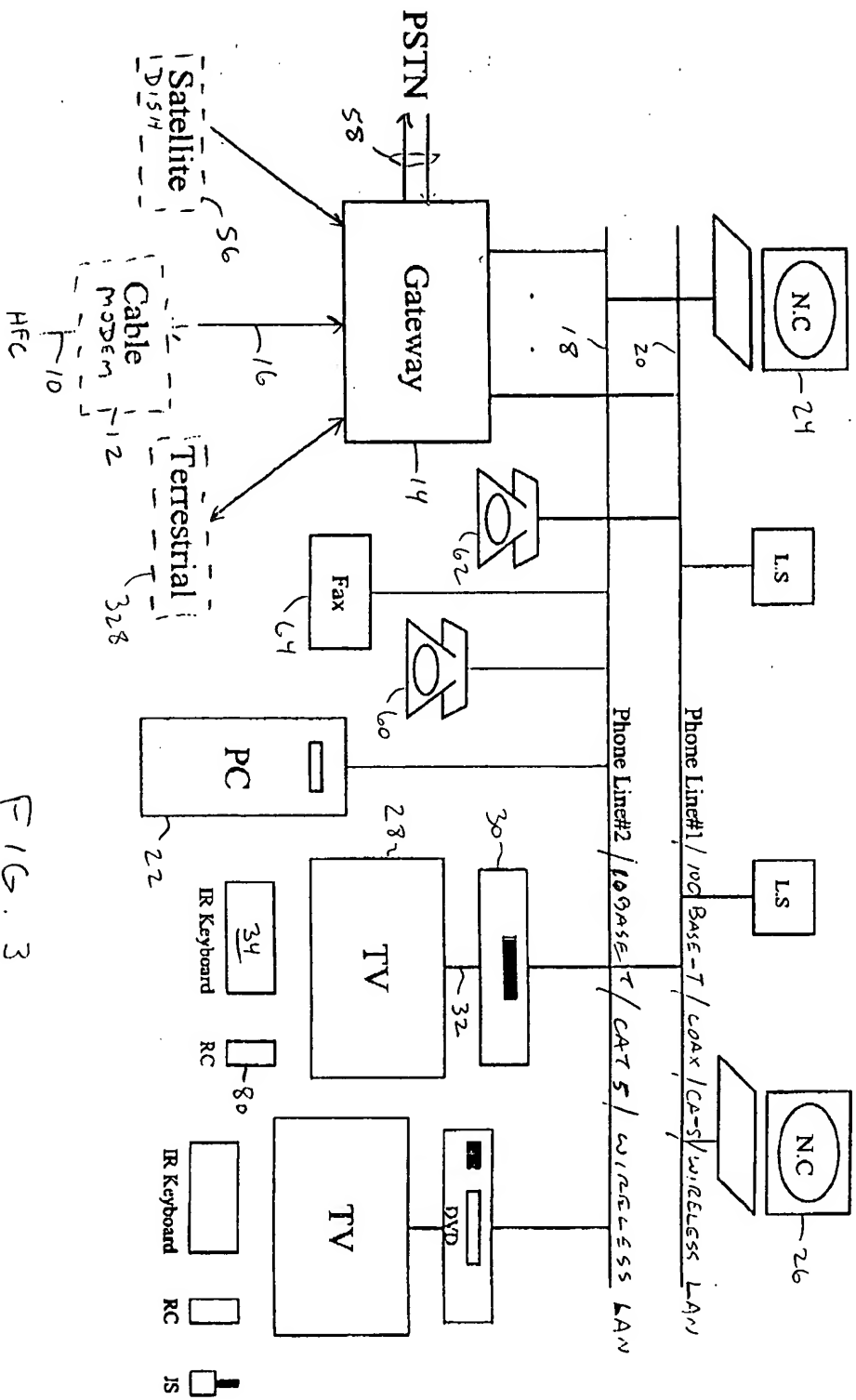


FIG. 3

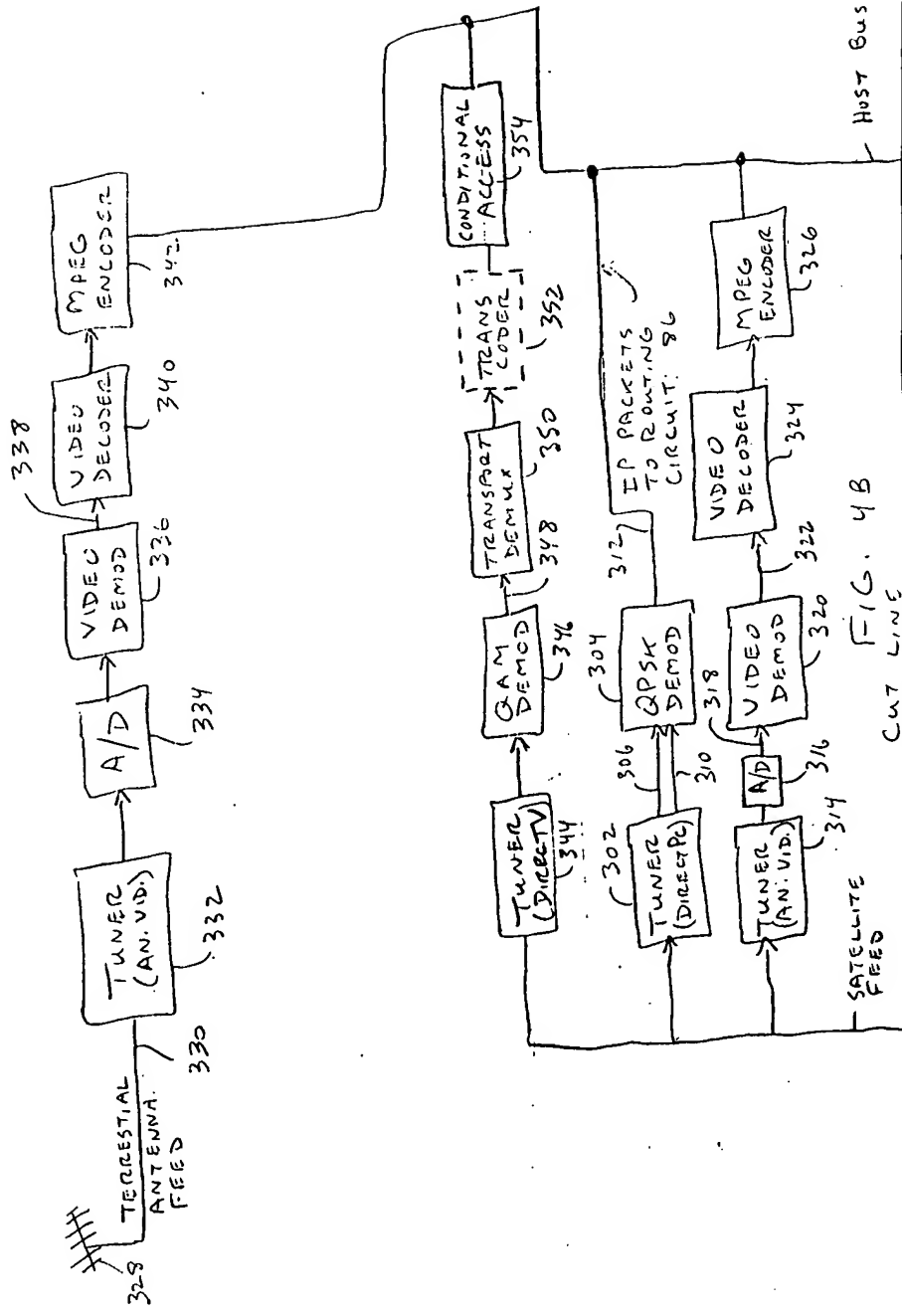


FIG. 4B

GATEWAY DETAILS CUT LINE - 230 222

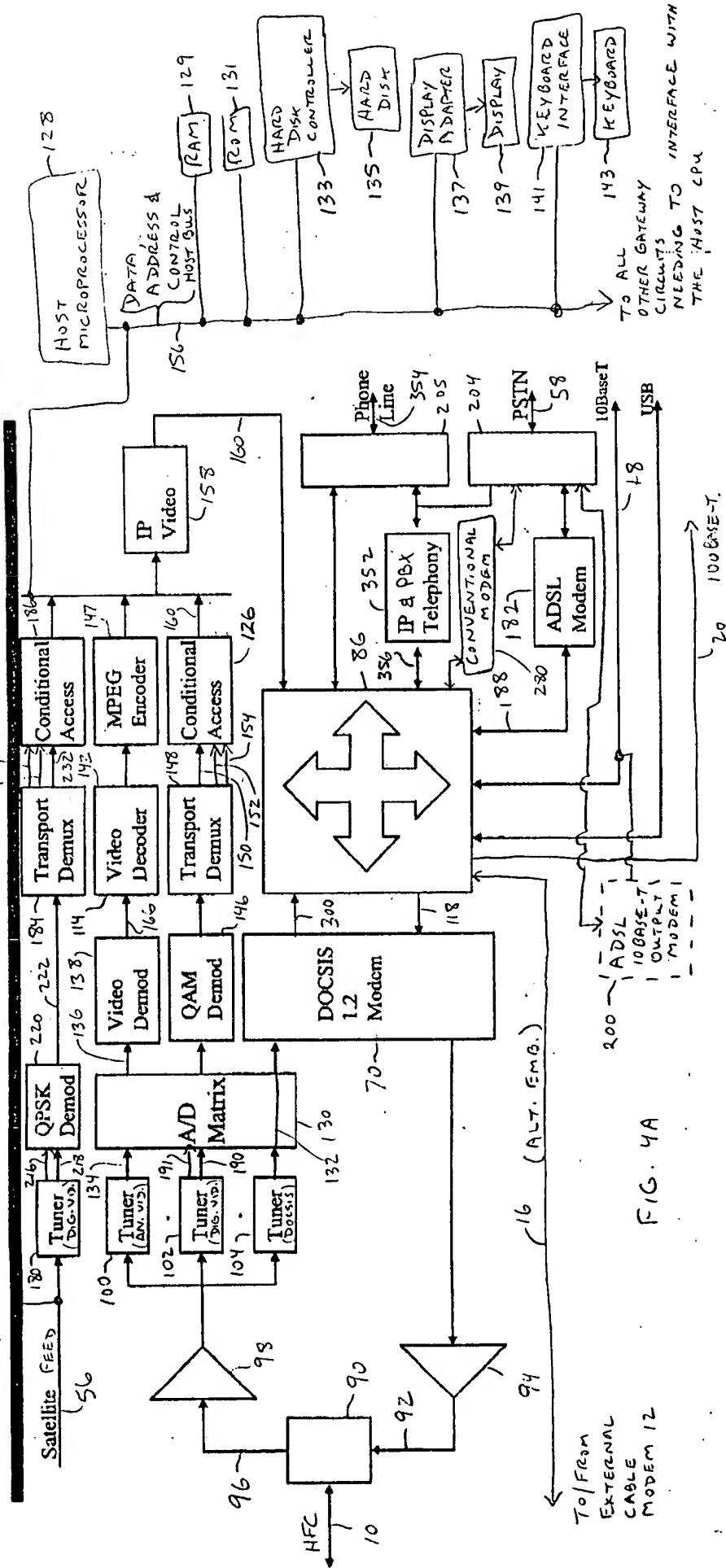


FIG. 4A

Video Adapter

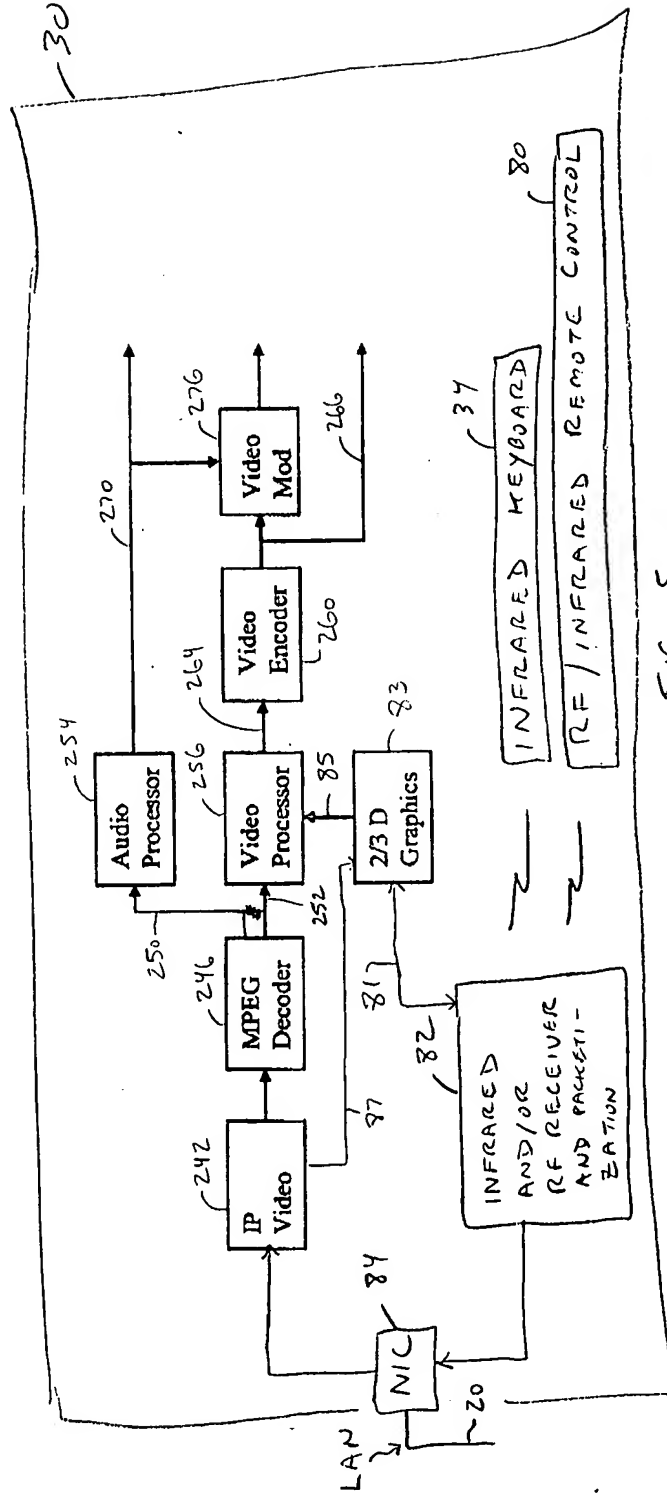
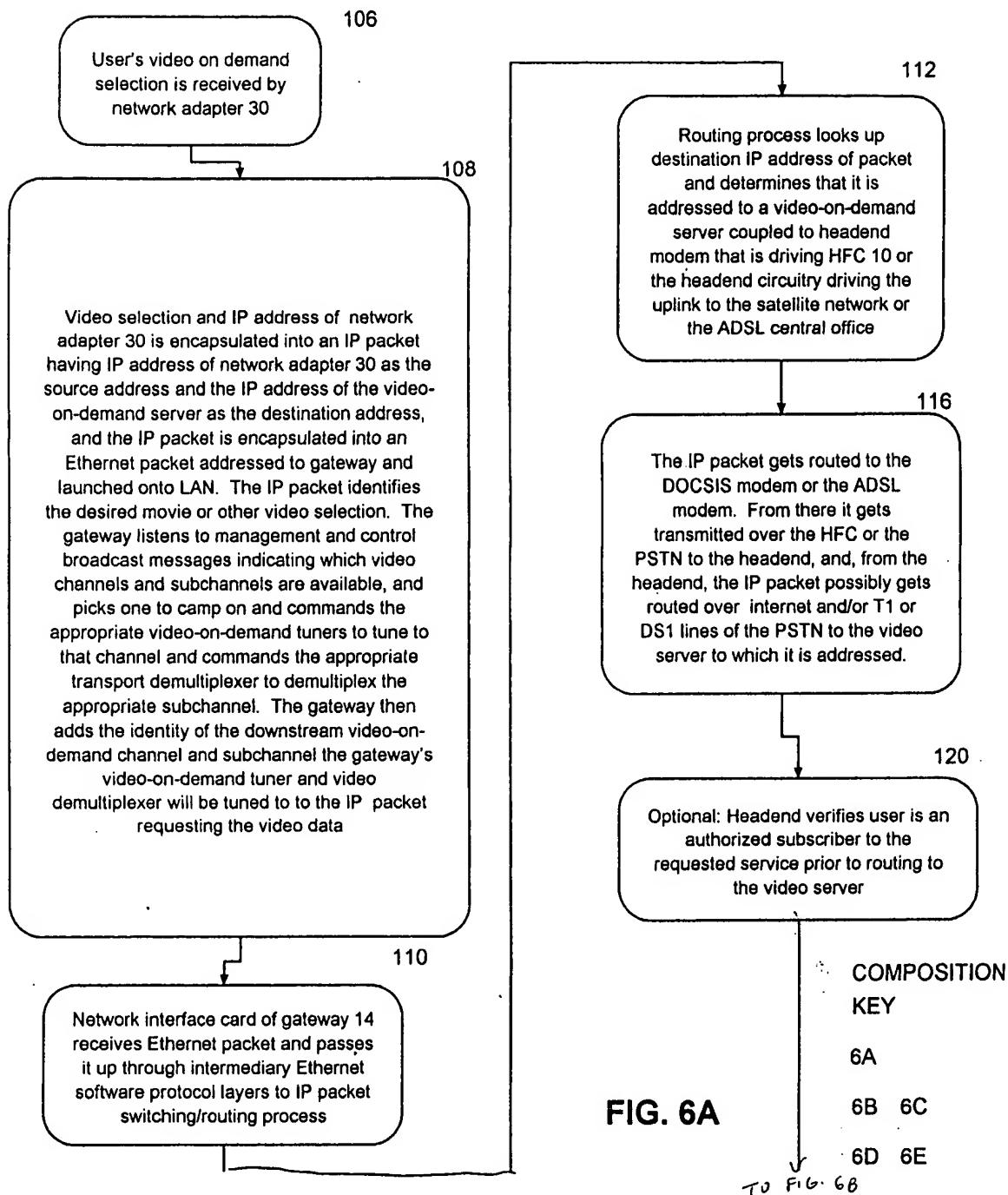


FIG. 5



Terayon Confidential Proprietary

VIDEO ON DEMAND PROCES "PULL" TECHNOLOGY



From
FIG. 6A

124

Video server reads IP packet of request, opens appropriate file and starts transmitting video data as IP packets addressed to network adapter 30 that requested video. Video data is compressed and encrypted before transmission.

Satellite Delivery Option →

ADSL Delivery Option

HFC Delivery Option

136

VOD data put on channel and subchannel identified in camping data given in original request. Alternatively, video server and headend put it on unused subchannels of an underutilized channel and send downstream management and control messages indicating where VOD data can be found. Gateway instructs tuner 100 and transport demultiplexer where to find VOD data. Tuner 102 rejects all other RF signals and demodulates the signal to remove the RF carrier component and passes video-on-demand data bearing I and Q baseband signals to A/D matrix 130 where I and Q values are sampled for each constellation point

140

Video, audio and associated data (if any) points of MPEG II compressed VOD data are recovered from constellation points

TO
FIG. 6D

198

Video server for ADSL network sends VOD data to an ADSL CO within 3 miles of subscriber via T1, DS1 or other high speed line or via ADSL downstream connection

202

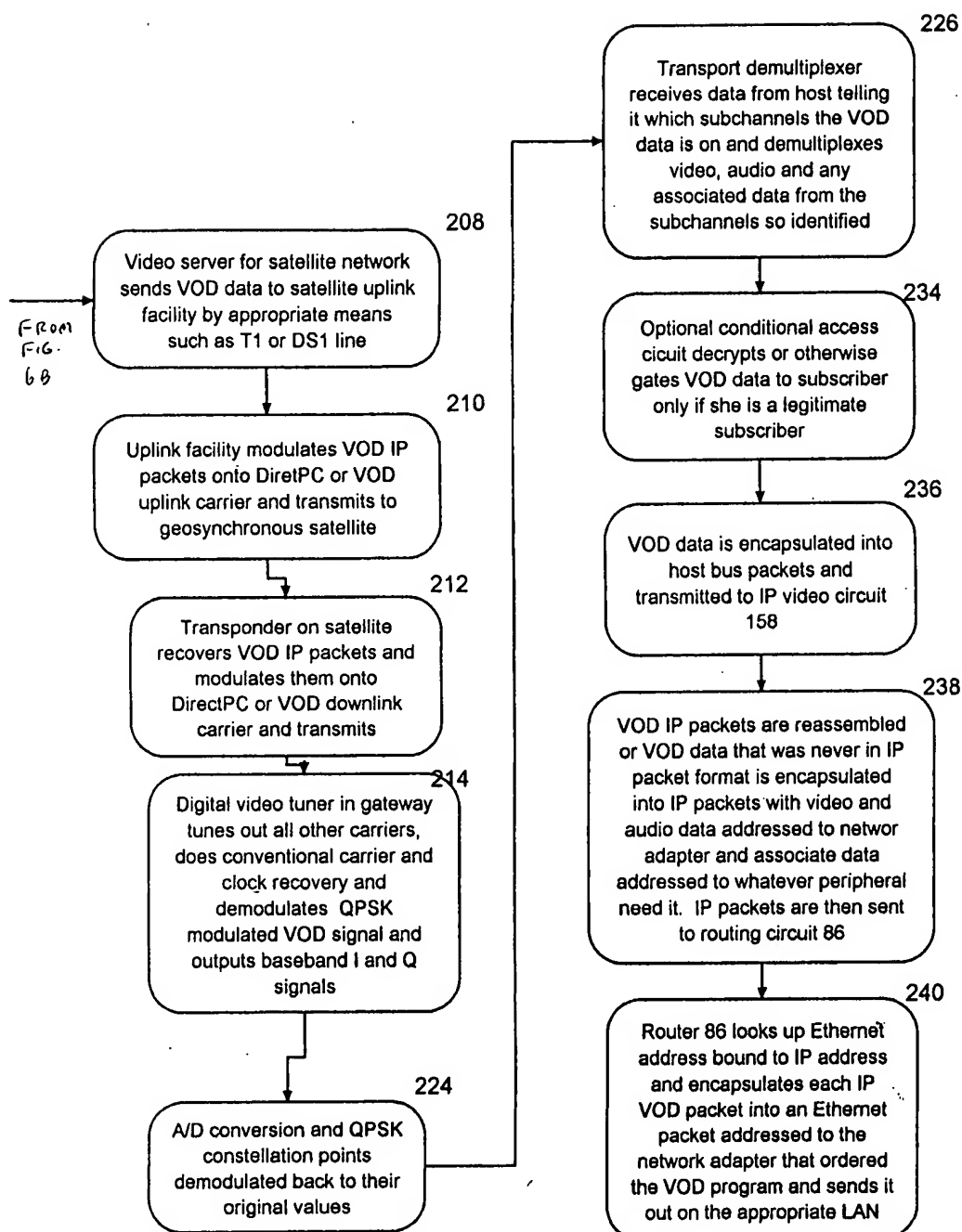
VOD data bearing IP packets are FDMA multiplexed onto ADSL downstream carrier and sent from CO to gateway of requester by appropriate local loop and are received by ADSL modem in gateway

206

IP packets are sent to routing circuitry from ADSL modem where the Ethernet address that corresponds to IP destination address is looked up. IP packets are encapsulated into Ethernet packets and sent to appropriate interface circuitry of LAN to which the network adapter which ordered the VOD program is coupled

TO FIG. 6D

FIG 6B



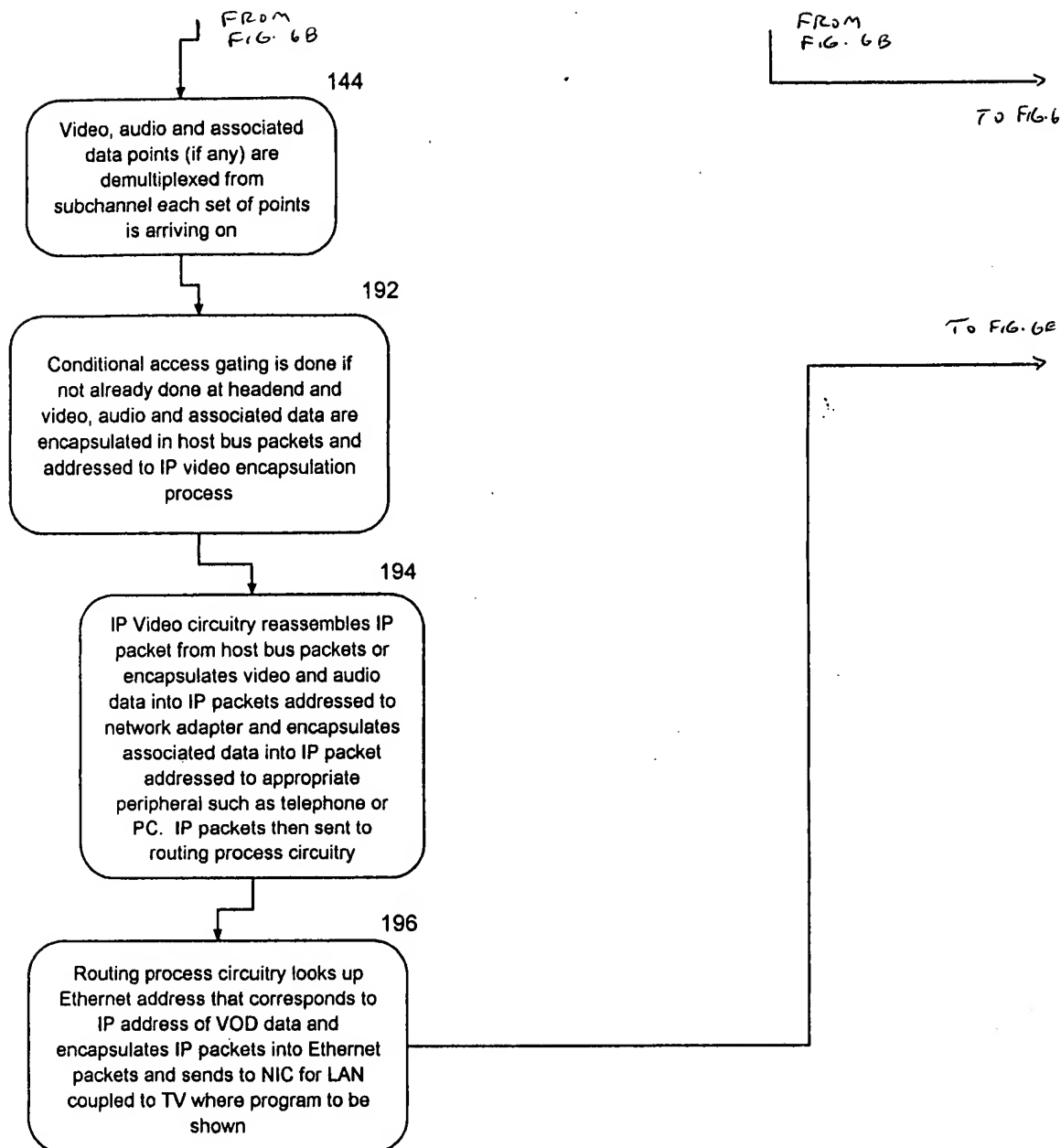


FIG. 6D

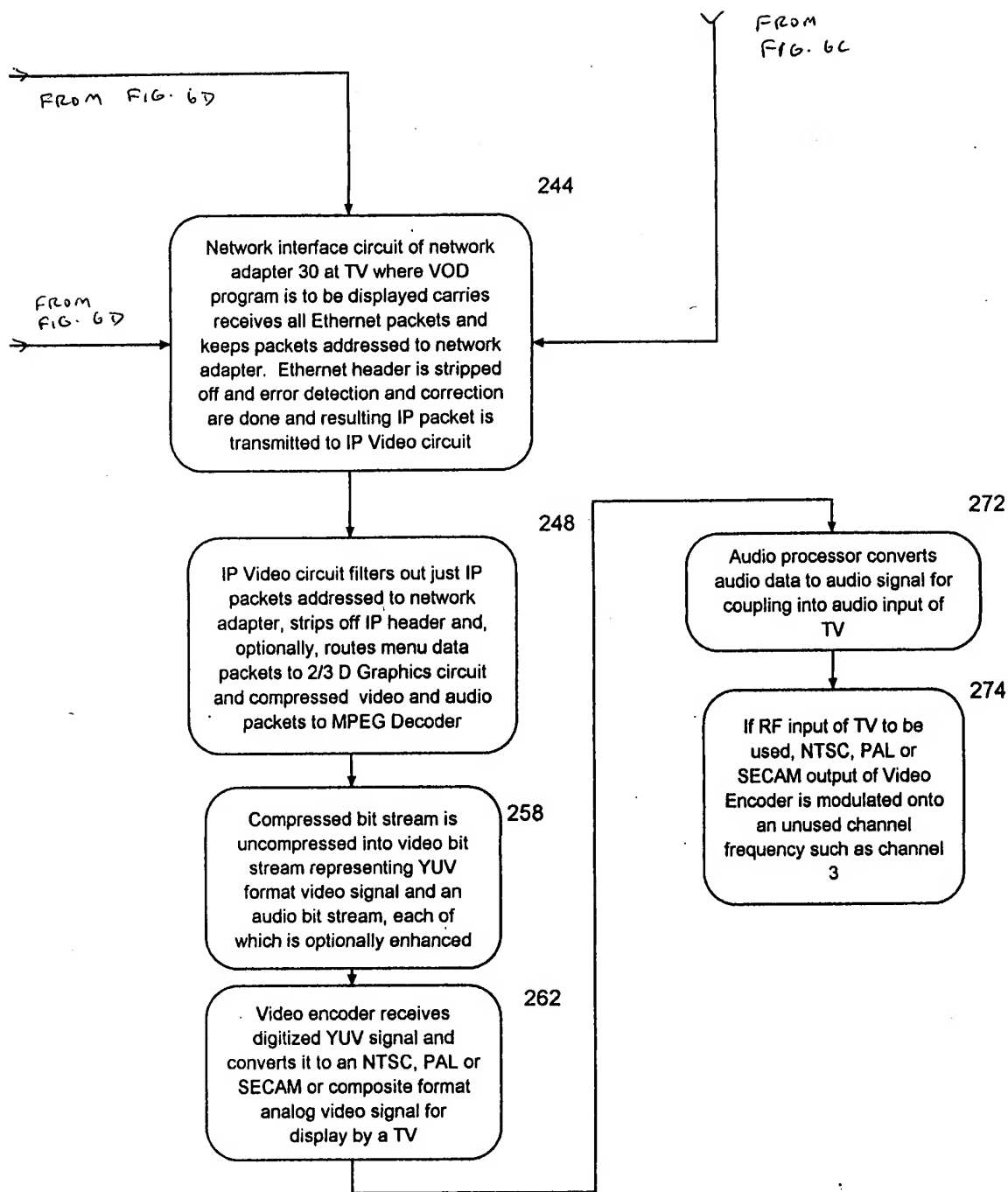


FIG. 6E

WIDEBAND INTERNET ACCESS PROCESS

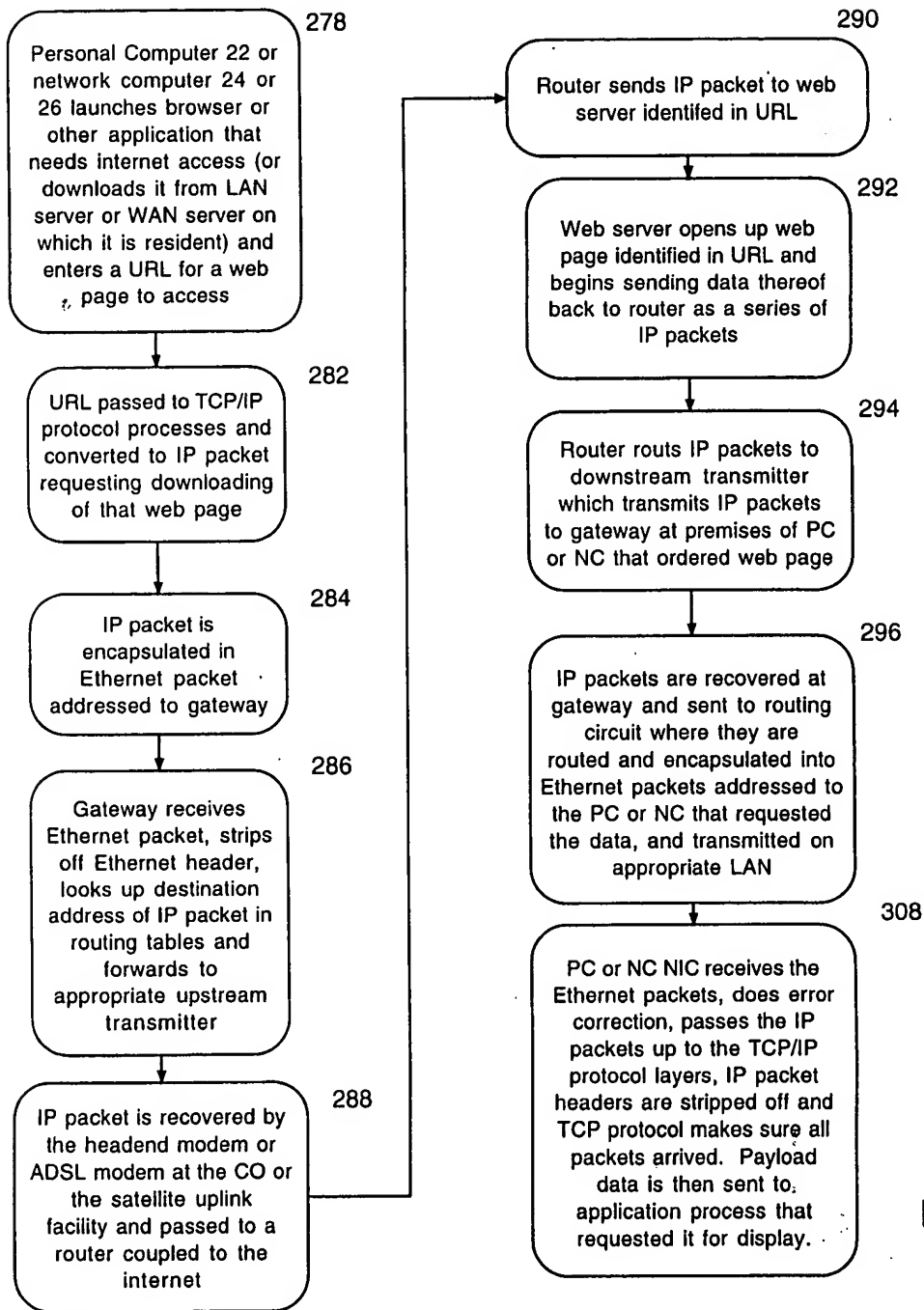


FIG. 7

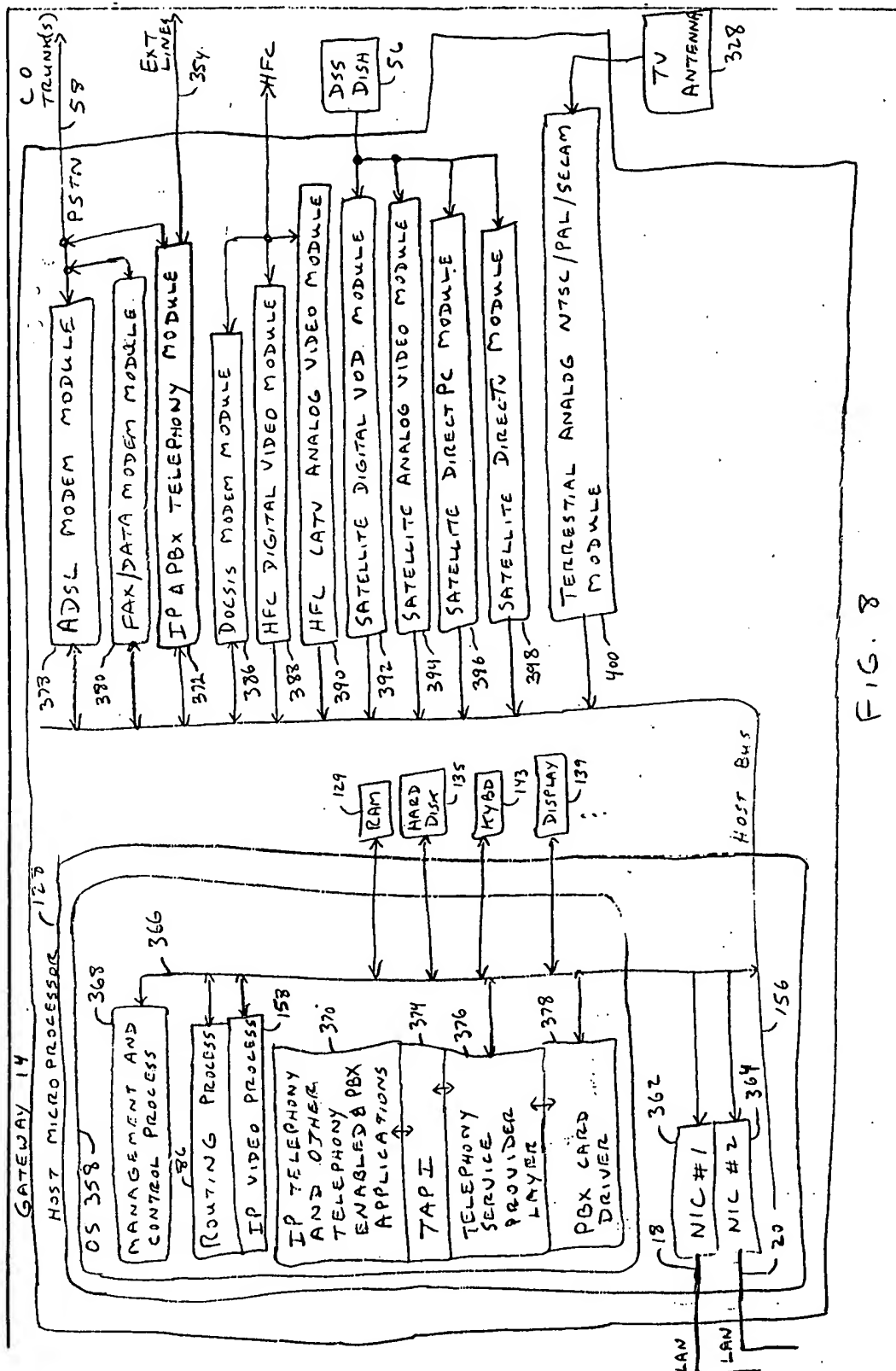


FIG. 8